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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,080	07/25/2001	James J. Fitzgibbon	69789	6492

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EXAMINER	
BANGACHON, WILLIAM L	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,080	FITZGIBBON ET AL.	
	Examiner	Art Unit	
	William L. Bangachon	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-11,23,24,26-37,39 and 40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,3-11,23,24,26-37,39 and 40* is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/24/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Examiner's comments*.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed 7/24/2006, with respect to the objection of the specification and rejection of claims 1 and 7-8 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, have been fully considered and are persuasive. The objection of the specification and rejection of claims 1 and 7-8 has been withdrawn.

2. Applicant's arguments with regards to claim 26 [page 11, 4th paragraph] have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **"the speaker dependent apparatus is initially activated and then the speaker independent apparatus is activated"**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. Finally, applicant's arguments with respect to claims 1, 3-11, 23-24, 30-37 and 39-40, have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3-7, 10, 23-24, 30-37 and 39-40, are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,280,527 {hereinafter "Gullman et al"} in view of US 6,792,083 {Dams et al}.

In claims 1, 7, 30, and 39, Gullman et al teach of a security control apparatus comprising:

a security device (i.e. electronic gate/lock 10) {paragraph bridging cols. 2 and 3};

a control apparatus (i.e. access device 12) responsive to security codes for enabling and disabling the security device {col. 3, lines 19-35+};

a voiceprint/speech activated controller unit (i.e. security code source unit 14) for communicating a token (i.e. security codes) to the control apparatus 12, as shown in figure 1, the security code source unit having a user controlled keypad and a voiceprint analysis apparatus 14, as shown in figure 2, and including circuitry responsive to the voiceprint analysis apparatus 14 for communicating to the control apparatus a security code including a portion (i.e. user input challenge code) representing user interaction with the security code source unit {col. 2, lines 40-47; paragraph bridging cols. 3 and 4}.

Although Gullman does not disclose **"the voice analysis apparatus comprises a speaker dependent voice analysis arrangement and a speaker independent voice analysis arrangement, the speaker independent voice analysis arrangement being activated when the speaker dependent voice arrangement fails to identify a received voice signal"**, such features are conventional as shown in Figure 3, steps 54-66 of Dams and described in column 4, lines 20-28. Dams suggests that the serial combination of a speaker-dependent and speaker independent voice analysis

arrangement, as claimed, is advantageous because it is beneficial to both frequent and novice or accidental users {Dams, col. 3, lines 3-4+ and lines 25-27+}. That is, using all recordings for training will always result in over-representation of frequent users and using only the failed recognition will result in performance oscillation, but all users will be able to use the system {Dams, col. 3, lines 33-39}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include the **"speaker dependent voice analysis arrangement and a speaker independent voice analysis arrangement, the speaker independent voice analysis arrangement being activated when the speaker dependent voice arrangement fails to identify a received voice signal"** of Dams in the system of Gullman because, as taught by Dams, all users including frequent and novice or accidental users, will be able to use the system.

In claims 3 and 5-6, the security code source unit comprises memory {col. 4, lines 44-49} for storing a pass code (i.e. user input challenge code) entered by a user in association with representations of speech generated by the voice analysis apparatus {Gullman, col. 2, lines 40-47+; col. 6, lines 30-45+}.

In claim 4, the circuitry for communicating responds to predetermined comparison characteristics between a stored speech representation and a spoken speech representation for communicating a security code {Gullman, col. 5, lines 60-65}.

In claim 10, biometric samples are obtained and stored as templates for a single or multiple users {Gullman, col. 5, lines 57-61+}.

Claim 23 recites the limitations of claim 1 and therefore rejected for the same reasons.

In claim 24, although Gullman in view of Yuschik and Pinzon do not disclose that **"the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the barrier control apparatus is controlled to move the barrier"**, at the time of applicant's invention, it would have been obvious to program the control apparatus 10 of Gullman to control the type of access or transactions {Gullman, col. 6, lines 42-45} as claimed, because it saves energy as compared to being enabled all the time, to one of ordinary skill in the art.

In claim 31, Gullman et al, teach of a security token (analogous to the claimed security code) that incorporates voiceprint information (i.e. general security code) of a user with user input challenge code (i.e. specific security code) entered using either a keypad or by voice {Gullman, col. 2, lines 40-47+; paragraph bridging cols. 3 and 4}. Gullman suggests that combining a token {i.e. security code) with biometric information is advantageous because tokens provide security during transmission while the biometric information is used as an ID.

In claims 32-34, the security code source unit comprises memory {Gullman, col. 4, lines 44-49} for storing a pass code (i.e. user input challenge code) entered by a user in association with representations of speech generated by the voice analysis apparatus {Gullman, col. 2, lines 40-47+; col. 6, lines 30-45+}.

With regards to claims 35-37, Gullman teach of storing one or multiple templates of biometric samples of a single or multiple users {Gullman, col. 5, lines 57-61}. The

biometric samples are combined with a fixed code. This allows the control apparatus to permit full or limited entry based upon the level of authorization assigned to a given user {Gullman, col. 4, lines 29-33; paragraph bridging cols. 5 and 6}. Obviously, the control apparatus can be programmed to control the type of access or transactions allowed for such fixed code {Gullman, col. 6, lines 43-45}, such as having temporary user specific portions which are intended to be erased upon the occurrence of an event, user specific portions erased in response to the passage of a predetermined amount of time, or user specific portions erased in response to a predetermined number of accesses, to save memory space, to one of ordinary skill in the art.

Claim 40 recites a method for practicing the apparatus of claim 1 and therefore rejected for the same reasons.

8. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,280,527 {Gullman et al} and USP 6,356,868 {hereinafter "Yuschik et al"}, and further in view of USP 6,161,005 {hereinafter "Pinzon"}.

With regards to claim 26, Gullman does not disclose a speaker dependent and independent analysis arrangement. In this case, Yuschik is relied upon to teach of the two types of speech recognition technology wherein the first is speaker-independent and the second is speaker-dependent {Yuschik, col. 2, lines 32+}. Yuschik suggests that it is desirable to use the two types of technology that identifies and verifies a user from a single utterance and at the same time, permit multiple users to have identical passwords {col. 3, lines 1-4+}. The systems of Gullman and Yuschik are analogous art

because first, they are from the same field of endeavor, biometric security system. And second, they are from the same problem solving area, as follows: Gullman is concerned with the use of personal identification numbers because a legitimate user must remember a given password, which can be burdensome for some users that have to remember too many passwords {Gullman, col. 1, lines 46-56}. Yuschik teaches that it is advantageous to use a voiceprint system over PIN number system for gaining access, because it is quicker and more convenient instead of having to punch codes, and more secure because a person's voice is unique and cannot be stolen {Yuschik, col. 1, lines 28-50}. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to have a speaker-independent and speaker-dependent arrangement in the voice recognition system of Gullman, as claimed, because, as evidenced by Yuschik, it allows the voice recognition system of Gullman to verify a user from a single utterance and at the same time, permit multiple users to have identical passwords.

Although, Gullman do not disclose **"a motor for operating the barrier"**, these claimed features would have been obvious in the system of Gullman to one of ordinary skill in the art, at the time of applicant's invention, because, as evidenced by Pinzon, all electronic door locking mechanisms have in common a motor for causing a mechanical locking member to move to a locking or unlocking position {Pinzon, col. 4, lines 34-45}.

In claims 27-29, although Gullman in view of Yuschik and Pinzon do not disclose that **"the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the barrier control apparatus is controlled to**

move the barrier", at the time of applicant's invention, it would have been obvious to program the control apparatus 10 of Gullman to control the type of access or transactions {Gullman, col. 6, lines 42-45} as claimed, because it saves energy as compared to being enabled all the time, to one of ordinary skill in the art.

9. Claims 1, 3-11, 23-37 and 39-40, are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0018478 {hereinafter "Mays"} in view of US 6,792,083 {Dams et al}, and further in view of USP 5,280,527 {Gullman et al}.

In claims 1, 4-6, and 39, Mays teaches of a speech activatable door operator system (i.e. security control apparatus 10) comprising:

a barrier or door (i.e. security device 20);

a base controller (i.e. control apparatus 36) responsive to security codes for enabling and disabling the security device 20;

a speech activated controller unit (i.e. security code source unit 38, 46, 48, 50) for communicating security codes to the control apparatus 36, as shown in figure 1, the security code source unit having a user controlled keypad 56 and a voice analysis apparatus 53, as shown in figure 2, and including circuitry responsive to the voice analysis apparatus 53, as shown in figure 3, for communicating to the control apparatus a security code [0021]-[0022]+. The voice analysis apparatus comprises a speaker dependent voice analysis arrangement and a speaker independent voice analysis arrangement {Mays, [0008], [0023]+}.

Although Mays does not disclose **"the speaker independent voice analysis arrangement being activated when the speaker dependent voice arrangement fails to identify a received voice signal"**, such features are conventional as shown in Figure 3, steps 54-66 of Dams and described in column 4, lines 20-28. Dams suggests that **"the speaker independent voice analysis arrangement being activated when the speaker dependent voice arrangement fails to identify a received voice signal"** as claimed, is advantageous because the combination is beneficial to both frequent and novice or accidental users {Dams, col. 3, lines 3-4+ and lines 25-27+}. That is, using all recordings for training will always result in over-representation of frequent users and using only the failed recognition will result in performance oscillation, but all users will be able to use the system {Dams, col. 3, lines 33-39}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include the **"the speaker independent voice analysis arrangement being activated when the speaker dependent voice arrangement fails to identify a received voice signal"** of Dams in the system of Mays because, as taught by Dams, all users will be able to use the system including both frequency and novice or accidental users.

Although Mays discloses that the keypad 56 may be used to condition the speech activation unit 53 [0021], Mays do not disclose expressly **"a security code including a portion representing user interaction with the security code source unit"**. Gullman et al, teach of a security token (analogous to the claimed security code) that incorporates voiceprint information (i.e. speech) of a user with user input challenge

code entered using either a keypad or by voice {Gullman, col. 2, lines 40-47+; paragraph bridging cols. 3 and 4}. Gullman suggests that combining a token {i.e. security code) with biometric information is advantageous because tokens provide security during transmission while the biometric information is used as an ID {Gullman, col. 1, lines 32-45}. The systems of Mays and Gullman et al are analogous art because they are from the same field of endeavor, secured biometric access systems. Therefore, at the time of applicant's invention, it would have been obvious to one of ordinary skill in the art to combine tokens with the speech activated door operator system of Mays, as claimed, because, as taught by Gullman, tokens advantageously provide additional security during transmission.

In claims 3, 10, and 31-35, the security code source unit comprises memory/template {Gullman, col. 4, lines 44-49} for storing a pass code (i.e. user input challenge code) entered by a user in association with representations of speech generated by the voice analysis apparatus {col. 2, lines 40-47+; col. 6, lines 30-45+}. Alternatively, multiple templates for multiple users are stored {Gullman, lines 60-65}.

Claims 7-9, 11, 23-25, 30 recites the limitations of claim 1 and therefore rejected for the same reasons.

In claim 24, the speech activation unit 53 is enabled for a predetermined period of time until either the battery runs out or the function is changed via the keypad switch {Mays, [0020]}.

Claims 26-29 recites the limitations of claims 1 and 24, further comprising a drive motor 30 for operating the barrier {Mays, [0017]}.

With regards to claims 35-37, Mays does not disclose "the memory comprises a first plurality of locations", as claimed. Gullman teach of storing one or multiple templates of biometric samples of a single or multiple users {col. 5, lines 57-65}. The biometric samples are combined with a fixed code. This allows the control apparatus to permit full or limited entry based upon the level of authorization assigned to a given user {Gullman, col. 4, lines 29-33; paragraph bridging cols. 5 and 6}. It would have been obvious, at the time of applicant's invention, to include a control apparatus that can be programmed to control the type of access or transactions allowed for such fixed code as taught by Gullman {Gullman, col. 6, lines 43-45}, such as having temporary user specific portions which are intended to be erased upon the occurrence of an event, user specific portions erased in response to the passage of a predetermined amount of time, or user specific portions erased in response to a predetermined number of accesses, in the system of Mays because it will save memory space, to one of ordinary skill in the art.

Claim 40 recites a method for practicing the apparatus of claim 1 and therefore rejected for the same reasons.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Office Contact Information

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William L. Bangachon whose telephone number is **(571)-272-3065**. The Examiner can normally be reached on Monday to Thursday, 8:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy Garber can be reached on **(571)-272-7308**. The fax phone numbers for the organization where this application or proceeding is assigned is **5(571) 273-830000** for regular and After Final formal communications. The Examiner's fax number is **(571)-273-3065** for informal communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6071.

William L Bangachon
Examiner
Art Unit 2612

October 10, 2006

BRIAN ZIMMERMAN
PRIMARY EXAMINER